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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,447	11/28/2003	Sylvain P. Tremblay	005811-0009	8258
20559	7590	12/06/2005	EXAMINER	
ROBIC CENTRE CDP CAPITAL 1001, VICTORIA SQUARE - BLOC E - 8TH FLOOR MONTREAL, QC H2Z 2B7 CANADA			KASTLER, SCOTT R	
			ART UNIT	PAPER NUMBER
			1742	

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/722,447

Applicant(s)

TREMBLAY, SYLVAIN P.

Examiner

Scott Kastler

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 5-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

Art Unit: 1742

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10-31-2005 has been entered.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3 and 5-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doza et al in view of Benson and Japanese'773. Doza et al teaches a dry, free flowing refractory material for use as a back-up insulating material (see col. 2 lines 32-44 and col. 3 lines 65-68 for example), including up to 100% by weight of a mixture of a matrix material and a lightweight filler material, both of which may be made up of fly ash in the form of cenospheres (ceramic hollow spheres, see col. 4 lines 3-36 and col. 5 lines 40-48 for example) and up to 15% by weight of a heat activated bonding agent (binder) which may be boric acid (see col. 4 lines 53-56 for example), thereby showing all aspects of the above claims except the specifically recited composition ranges, which fall within the broad composition ranges stated to be equally useful

Art Unit: 1742

disclosed by Doza et al, or the inclusion of a non-wetting agent in the composition, since the heat expandable materials and dust suppressants recited in the instant claims are recited as optional components only (they are met by a 0% amount). Benson teaches, in the embodiments of Experiments 1 and 4 for example, that conventional non-wetting agents (see col. 5 lines 45-50 for example) in amounts of about 2% by weight, were known additives in dry, free flowing compositions for use in metallurgical applications for improved resistance to molten metal. Japanese'773 teaches that calcium fluoride was a known non-wetting agent suitable for addition to refractory compositions at the time the invention was made. Because the refractory material of Doza et al, which is intended for molten metal applications, would also desire the improved resistance to molten metal afforded by the conventional non-wetting agent addition taught by Benson, motivation to employ a conventional non-wetting agent known to be useful in refractory compositions in the form of calcium fluoride, as taught by Japanese'773, in the refractory composition of Doza et al, would have been a modification obvious to one of ordinary skill in the art at the time the invention was made, where the resulting composition would be reasonably expected to inherently possess the thermal conductivity and setting temperature recited in instant claim 1. With respect to the compositional differences between Doza et al and the instant claims, it has been well settled that where, as in the instant case, the applied prior art teaches a composition range which encompasses a claimed range, then absent any demonstrated new or unexpected results arising therefrom, motivation to select values from the claimed range within the prior art disclosed broader range, would have been a modification obvious to one of ordinary skill in the art at the time the invention was made. See MPEP 2144.05. In the instant case, because Doza et al teaches a composition which encompasses the instantly claimed composition

Art Unit: 1742

range, motivation to employ any of the equally useful ranges taught by Doza et al as the dry, free-flowing refractory composition of Doza et al, would have been a modification obvious to one of ordinary skill in the art at the time the invention was made.

### ***Response to Arguments***

Applicant's arguments filed on 10-31-2005 have been fully considered but they are not persuasive. Applicant's argument that the expanded alumina silica hollow microspheres of Doza are not the same as the cenospheres of the instant claims is not persuasive because the originally filed specification, on page 3, lines 11-15 recites cenospheres as ceramic hollow microspheres of silica and alumina. Applicant's further arguments that the instantly claimed compositions requiring the use of fly ash containing cenospheres specifically rather than the broader disclosure of Doza (where the use of cenospheres is recited as one of many different possible components) results in improved properties in the material is not persuasive because firstly, the product brochures cited by the applicant in page 8 of the arguments were not received and therefore cannot be evaluated with respect to overcoming the above rejections, and secondly, any evidence or showing of new or unexpected results (as is argued by the applicant with respect to the instant composition with respect to the composition of Doza) must be presented in proper, affidavit or declarative form to be persuasive (see *In re Wood et al*, 199 USPQ 137). It is noted however, that submission of such evidence or showings in proper form would overcome the above rejections.

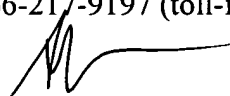
Art Unit: 1742

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Scott Kastler  
Primary Examiner  
Art Unit 1742

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